

CLAIMS

1. A bag system for collecting a biological fluid comprising:

a collection device;

5 a fluid collection bag in fluid communication with the collection device; and

a sampling device in fluid communication with the collection device, the sampling device including:

at least one sampling receptacle; and

10 a transfer device having an associating device operable to support the receptacle in a standby position, guide the receptacle to a transfer position, and allow dissociation of the receptacle from the bag system.

15 2. The system of Claim 1, wherein the biological fluid comprises blood.

3. The system of Claim 1, further comprising:

20 a first tube to establish fluid communication between the collection device and the fluid collection bag; and

a second tube to establish fluid communication between the collection device and the sampling device.

4. The system of Claim 3, wherein the sampling device further comprises a sampling bag connected to the downstream end of the second tube.

5 5. The system of Claim 1, wherein the receptacle has a body having a first diameter and further comprises a closure element having a second diameter greater than the first diameter

10 6. The system of Claim 5, wherein the transfer device further comprises:

a hollow guide open at a front part to allow introduction of the sampling receptacle; and

15 a hollow needle in fluid communication with the bag system,

wherein the hollow needle passes through a rear part of the guide so that a downstream part of the needle extends inside the guide and an upstream part of the needle extends outside the guide, and

20 wherein the hollow needle is operable to perforate the closure element of the receptacle, placing the downstream part of the needle inside the receptacle.

25 7. The system of Claim 6, wherein the association device further comprises a first and second set of projections distributed longitudinally on an internal face of the guide,

wherein the projections are arranged so as to be deformable by sliding the receptacle inside the guide, and

wherein the projections are arranged so as to permit a reversible association of the receptacle inside the guide
5 and the sliding of the receptacle inside the guide between a standby position at a distance from the needle and the transfer position.

8. The system of Claim 7, further comprising at least
10 one flexible projection reversibly deformable from a position included towards the rear of the guide by contact of the receptacle while sliding inside the guide in a rear to front direction, to a position inclined towards the front of guide while sliding in a front to rear direction.

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9. The system of Claim 7, further comprising the a first set of projections breakable under the deformation and located near the needle.

20 10. The system of Claim 7, further comprising a plurality of transfer devices, each having a receptacle associated in a dissociable fashion and each in fluid communication with the bag system through the second tube or a third tube.

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11. The system of Claim 6, further comprising the association device operable to support at least two receptacle in the standby position and to allow their sequential guidance into the guide.

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12. The system of Claim 11, wherein the association device further comprises:

a housing associated with the guide; and

10 a skirt provided on the housing into which the closed end of the receptacle is introduced in order to allow the longitudinal sliding of the receptacle in the housing towards the guide,

15 wherein an internal wall of the skirt is provided with a projection intended, by interaction with the closure element, to prevent transverse withdrawal of the receptacle from the housing.

13. The system of Claim 12, wherein the skirt further comprises:

20 an open end disposed opposite a scallop formed in the guide; and

a closed end.

14. The stem of Claim 6, wherein the guide further comprises a cap having a tamper-evident element.

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15. The system of Claim 1, further comprising the transfer device having several receptacles associated therewith and the transfer device in fluid communication with the bag system through the second tube or a third tube.

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16. The system of Claim 1, further comprising at least two identification tags, one disposed on the collection bag and the other disposed on the receptacle, wherein the tags allows the establishment, after their dissociation, that both the collection bag and receptacle originated from the same bag system.

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17. The system of Claim 16, further comprising a fourth tube in fluid communication with the collection bag and at least one satellite bag, wherein the satellite bag is also provided with an identification tag.

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18. A method of collecting a biological fluid
comprising:

placing a collection device in a donor;

collecting the fluid in a sampling device having at
5 least one receptacle and a transfer device having an
association device;

placing a first receptacle in a standby position in the
association device of the transfer device;

moving the first receptacle to a transfer position in
10 the transfer device to allow flow of the biological fluid
into the first receptacle;

dissociating the first receptacle from the association
device.

15 19. The method of Claim 1, further comprising:

moving a second receptacle in the association device
from the standby position to the transfer position; and

dissociating the second receptacle from the association
device.